Appl. No. 10/612,001

Atty. Docket: 0142-0415P

AMENDMENTS TO THE CLAIMS

1. (Original) A method of controlling an inkjet printhead with a substantially closed duct in which ink is situated, said duct having an exit opening for the ink, which comprises:

- actuating an electromechanical transducer so that the pressure in the duct changes in such a manner that an ink drop is ejected from the exit opening, said pressure causing a deformation of the transducer, and

- after the end of the actuation, measuring an electric signal generated by the transducer as a result of said deformation, wherein a subsequent actuation of the transducer is adapted to the measured signal, while the printhead is in a printing mode for image-wise printing of a receiving material.

2. (Cancelled).

3. (Original) The method according to claim 1, wherein by analyzing of the measured signal it is possible to determine a value for the electromechanical coefficient of expansion of the transducer, a negative pressure in the ink duct, the ink level in an ink reservoir connected to the ink duct, the viscosity of the ink, the temperature of the transducer.

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4. (Original) An inkjet printhead which contains a substantially closed ink duct for holding ink, said duct having an exit opening for the ink, said printhead further comprising:

- an actuation circuit for actuating an electromechanical transducer in such a manner that the pressure in the duct changes so that an ink drop can be ejected from the exit opening, the pressure change causing a deformation of the transducer, and

- a measuring circuit for measuring, after the end of the actuation, an electric signal generated by the transducer as a result of the deformation, wherein the printhead contains a control unit to adapt a subsequent actuation of the transducer to the measured signal.

- 5. (Original) An inkjet printer provided with a printhead according to claim 4.
- 6. (Original) The inkjet printhead of claim 4, wherein the actuation circuit comprises a pulse generator communicating with the transducer through a switch and the measuring circuit comprises the control unit communicating with said transducer through said switch.